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Landscape Architect and Nurseryman
Your grounds planted with our extra grown shrubs and specimen trees and evergreens will give you immediate results.

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Lansing, Mich.
Final steps were taken at the meeting of the plans committee of the M. A. C. association and the executive committee of the same body on Thursday of last week to start the campaign to complete the fund for the Memorial Union building. Irving Pond of the firm of Pond & Pond presented the revised plans for the structure to the members of the plans committee in the morning of that day and they were approved and in the afternoon the machinery was set in motion to carry out the project so that work could start on the new building in the spring with the ceremony of turning the first sod taking place at Commencement time.

J. R. McColl, '90; Mrs. E. W. Ranney, '99, and W. O. Hedrick, '93, of the plans committee, met with Mr. Pond at the Flower Pot Tea room and went into the new features of the design with him. All were impressed with the changes, which do not alter the general scheme of the building but serve to make it more compact and convenient, and gave their general approval of the plans. Mr. Pond explained in detail the arrangement of the interior which serves to provide more room and to better fit special occasions with the least possible hindrance to the general work of the building and said he was satisfied that many features of the design were much better worked out than originally because his firm had had the opportunity of trying out its designs under college conditions which had demonstrated the relative strength of some of the sections.

Complete blue prints and elevation drawings have been prepared at the Chicago office of the architects and will be available for publication with full descriptions when the committee in charge decides they are ready to be released. There will undoubtedly be several minor alterations in line with the suggestions of the committee before the designs are allowed to be published. This will insure that the first glimpse the graduate body has of the scheme of operation will show the building the way it will be when erected.

The committee expressed the hope that the entire structure could be erected immediately so that there would lower the cost and give the college facilities to entertain its guests and center the activities of the student body in a manner which has long been a necessity. When the Memorial Union building is completed wants which have been more apparent during the past ten years will be filled and it will be in a position to serve its purpose.

Herbert Bamber, '81, and P. B. Woodworth, '86, members of the plans committee, were unable to attend the meeting but will be fully informed of the action taken and the plans which were presented so their opinions may be obtained to guide the committee. Both are intensely interested in the project but found it impossible to meet with the other three members on Thursday and expressed the desire that no delay be permitted in the work of getting the scheme under way. Woodworth is president of the Rose Polytechnic Institute at Terre Haute, Ind., carrying on an active practice in patent law with his administrative duties and finds his time well taken up but has promised to advise the committee.

President Ranney on a recent trip through the east visited the home of Dr. Beal in Amherst and had an extended talk with this noted friend of M. A. C., the greater part of whose life was spent on the campus and who has been a most ardent supporter of the college since he retired from active teaching and accepted the title of Professor Emeritus of Botany. Dr. Beal's health has not been good for a year but he retains an active interest in M. A. C. and follows the affairs of the association closely enough to recall to Ranney that as president of the association he must be making frequent trips to the college. He expressed his best wishes for the institution and the alumni with many of whom he was closely acquainted while serving on the faculty.

George Gauthier, '14, who will lead his Ohio Wesleyan eleven against the Aggies November 11 has made a direct threat against the success of the M. A. C. team in the record he has compiled this season. In three games he has conquered two of his opponents by wide margins and held Ohio State to a 5 to 0 score in the new stadium three weeks ago. With two conference games tucked under their belts by that time the Green and White will be ready for a stiff battle.
RECORD

THE M. A. C. RECORD

THREE HAVE CHARGE OF FUND CAMPAIGN

Arranging the campaign for funds for the memorial building and caring for all of the details in regard to such an activity is a task which the executive committee has left in the hands of the president, vice-president and secretary of the M. A. C. association. Included in the powers of this extraordinary committee were the hiring of necessary help and the taking of such other steps as it deems advisable to carry through the solicitation to a successful termination with the goal fixed at starting building work in time for the first sod to be turned at Commencement time next June.

Those present when the committee convened in the Flower Pot Tea room at 3:45 Thursday afternoon were: President E. W. Ranney, Vice President A. B. Cook, Treasurer Frank F. Rogers, A. C. MacKinnon, '95; R. V. Tennor, '09; G. V. Branch, '22; W. O. Hedrick, '93.

Hedrick reported for the plans committee announcing that the committee had inspected and approved the designs for the building as presented by Mr. Pond. That the scheme had provided for the erection of certain portions of the building at separate times if this were desirable and urging the sentiment of the body that the alumni make every effort to construct the entire building at once if that were deemed possible. He outlined in detail the plans of Mr. Pond as they now appear and said he believed the changes would add greatly to the beauty and utility of the building. In general he reported that his committee approved the new designs but expected that minor alterations would be made.

A discussion then took place as to the advisability of handling all the campaign work through a separate committee which would have full power to conduct the work and be invested with authority to spend such funds as were necessary to accomplish its purpose and keep within the income from the fund rather than use any of its principal. At the very highest it is planned that the expense of the drive will fall below the average used in other colleges.

Cook moved that a committee be appointed to consist of the president and secretary of the association to plan and conduct the campaign. This was amended so the body also includes the vice-president so that the work will not add too much to Mr. Ranney's duties as executive of the association. The motion was approved as amended.

It was voted upon suggestion of Mr. Cook that the secretary and treasurer request that the East Lansing State bank furnish a surety bond for the money which is deposited there in return for the privilege of acting as depository for the fund.

Hedrick was designated by the president to communicate with the State Board to have the site for the building set aside and the construction authorized. Plans for the structure contemplate carrying out the scheme of the landscape architects in establishing a quadrangle extending from the armory and Abbot hall to Faculty Row.

OFFICIALS TO LAY TWO CORNERSTONES

A formality which has not been introduced into such events in a long time will be seen when the cornerstones for the library and home economics buildings are laid Tuesday, October 31. On that occasion the college will have as its guest Secretary H. C. Wallace of the U. S. department of agriculture and he, with Governor Groesbeck, will take part in the program which will mark the occasion. The program is scheduled to start at 10:30 o'clock and classes will be suspended from that time until after Mr. Wallace speaks to the students and guests in the gymnasium at 1:30 o'clock.

A cavalry escort will be provided for the visitor of the day and the regulation salute will be fired in his honor. Lt.-Col. Sherburne has charge of the military display and has made all arrangements to do full honor to the visitor. It is probable that the governor will officiate at one cornerstone and Secretary Wallace at the other although the details of just how this was to be done had not been decided before the Record went to press.

In the cornerstones there will be placed, among other things, one of the last numbers of THE RECORD and Holcomb, coins of recent date, maps of the campus and similar tokens of historical interest which might prove of value in future centuries after the buildings have outlived their usefulness and are giving way to new structures.

East Lansing is soon to have a place on the map. Complete arrangements have been made by the Michigan Railways company to place a freight, passenger, express and telegraph station on M. A. C. avenue near Grand River. It is believed this move will result in the elimination of the college loop which has been a rift in the lute of those who wish to beautify that section of the campus upon which the rails encroach. It will mean many added conveniences for the people of East Lansing and the students.

The general center of the town will probably drift toward the new station and relieve the space around the East Lansing bank of some of its congestion during rush times. If the cars all go as far as the station the new scheme will add greatly to the convenience of those who live in the eastern section of East Lansing and in general the trolley company will better its service.
TAYLOR IS CHOSEN COLONEL OF CADETS

William H. Taylor, '23, was chosen colonel of the cadet regiment by an examining board composed of military instructors attached to the college which convened and examined a list of men designated by the commanders of the different units. Many different qualifications were considered by the board and Taylor was selected as coming closest to the desired standard. Taylor is editor of the Holcad and is prominent in all college activities.

Prof. A. J. Clark, director of the band, has been commissioned a captain instructor in the Officers' Reserve Corps. Professor Clark has been instrumental in producing the best bands in the history of the college and his new rank was obtained for him through Lt.-Col. Sherburne, who believes music a very important part of cadet training, as a recognition of his services and to provide him with military rank in connection with his organization.

MARRIAGES

The Rocky Mountain News of Denver records the marriage of Louis G. Carpenter, '79, of that place and Miss Catherine Warren of Philadelphia in Denver on September 30. Part of the story follows:

"Prof. Louis G. Carpenter of 1455 Gilpin street, noted throughout the world as a consulting engineer and the organizer of the first school of irrigation in the world at the Colorado State college, and Miss Catherine Warren, daughter of Mr. and Mrs. Frank S. Warren of Philadelphia, were married here Saturday evening, Sept. 30, at the home of the former's daughter, Mrs. Roe Emery, of 648 Humboldt street.

"Immedtately afterward Professor and Mrs. Carpenter went to Colorado Springs on a short honeymoon.

"Mr. Carpenter for a number of years was on the faculty of the Colorado State Agricultural college at Fort Collins, and while there organized the first school of irrigation in the world. He has been identified with scores of great irrigation projects in the West as consulting and constructing engineer and is widely known for his engineering achievements.

"He has two children, Mrs. Emery and Charles L. Carpenter of Omaha. Mr. Carpenter is a warm personal friend of Samuel Hill, noted as a railroad builder. He entertained Mr. Hill when he came through Denver last spring with Marshal Joffre. He is a graduate of the Michigan Agricultural college, the University of Michigan and Johns Hopkins university and served on the faculties of several institutions."

SEND PROMPTLY FOR U. OF M. TICKETS

If you send in the money for your Michigan game tickets immediately Prim will see that you get them. Most of the first block reserved have already been sent out but more have been obtained for your convenience. The only way to get in with the old gang is to have your tickets handled through the athletic department and this must be done promptly for the day is not far distant when the sun will rise on Ferry Field to add another Aggie-U. of M. battle to history. Saturday's contest is certain to be a battle worth watching. Michigan may have established a winning record but this must be discounted when the Maize and Blue faces the Farmer crew. The Aggies are on their toes awaiting the whistle.

JEWELL FAMILY WINS PRIZE IN KANSAS

The Kansas City Star for October 14 contains the following dispatch:

Topeka, Kas., Oct. 14.—Winners of the "fitter families" contest at the Kansas free fair in Topeka last month were announced yesterday by Dr. Florence B. Sherdon of Lawrence, superintendent of the eugenic division. Mr. and Mrs. Daniel A. Forbes and one child of Lyndon and Mr. and Mrs. Albert H. Jewell and one child of Lawrence tied for first in the small family division. Forbes is a farmer and Jewell a sanitary engineer.

Jewell might also be called a "farmer" with some justification for he is a graduate of M. A. C. with the class of '14. He is chief sanitary engineer for Kansas and director of the state board of health laboratories.

W. W. Lavers, '15, engineer of Huron county, breaks into print in the annual report of the board of road commissioners of his county with an article on "Maintenance." The report is printed in a neat little booklet of some fifty pages, profusely illustrated and minutely descriptive of the work which has been done to improve the roads of the county together with the plans for future work.

In his article Lavers explains the system under which the roads are maintained and discloses the complete instructions patrolmen in the county are given in regard to the care they are to give the highways. He stresses the importance of maintaining roads in the proper manner as the best way in which the taxpayer's money may be conserved.

The Freshman class has elected the following officers: President, Glen Burhans; vice-president, Helen McDowell; secretary, (Miss) G. M. Smith; treasurer, A. Mason.
Possibly, if you have grown cynical, you believe you are sated with the beauties of nature. Perhaps your travels have taken you to scenes of great natural splendor. Grant either or both of these hypotheses and return with us to the campus as it appeared on two glorious autumn days two weeks ago and your eyes will be opened anew to the magnificence of God's handiwork.

Let us enter the campus at the Post Office and walk to where the drive along faculty row crosses our path. Look to the right. Hard maples and elms opposite the surrounding old Beal residence, aided by the evergreens, form a picture to tempt the hand of a master painter. Here and there above its companions a dignified elm looks down upon the display of colors flanked by the maples with all their shading tints of yellow and red. In perfect symmetry the small evergreens and giant spruces and pines give the artist a background which accentuates the living blue of the sky. The road winds through, a forgotten ribbon of plain color dropped carelessly upon the turf amid the fallen leaves.

But leave this alluring view and turn slightly to the left where Abbot hall, of loved memory, nestles among its protecting banks of contended spruces. Before it and toward the site of old College hall is an ever-changing panorama of red, yellow, and more somber hues. Toward the Woman's building your horizon is limited by the masses of oak and maple foliage which touch off the landscape into a flaming fury of colors. Always the spruces and cedars are at hand to emphasize the brilliant beauty of the deciduous trees. With the leaves they disappear on its path toward the Coop amid solid banks of leaves tinted with rose and gold.

Crown this scene with a bright autumn sun, shade it with the slight haze of fall and let a few leaves flutter to the ground at the urge of a soft summer breeze. There you have a picture worth a thousand old masters.

Now follow us upon an iconoclastic journey. You have seen but one of the thousand beauties of the campus and there are many others which transcend it in sheer loveliness. Walk past the parade ground with its flag staff near the armory and Sleepy Hollow at the far end partly hidden by the ever present green of the conifers. Tall trees with a spirit of service. It is hemmed in on both sides but by beauty alone. Leaning maples and sycamores overlook its march of color ending in the whole gamut of color.

Stop on the bridge, look toward Farm Lane and you will always remember that moment. The river is a symbol of the lives of those at M. A. C. It travels always toward its goal with a spirit of service. It is hemmed in on both sides but by beauty alone. Leaning maples and sycamores overlook its march of color; its feathery load of leaves and mirroring its beautiful banks as it flows slowly onward.

Are you keeping in close touch with college affairs? The Record is trying to draw you closer to the campus by taking the atmosphere of the campus to you. Have you any suggestions to offer?

WILL VACATE CAMPUS ON NOVEMBER 4

A general exodus of all except the watchman and a few hospital cases will take place on November 4 when East Lansing and the Aggie student body and college staff will make their annual pilgrimage to Ann Arbor to see the Green and White clash with the Maize and Blue. Lansing has almost prepared to send a heavy representation for some of its favorite sons are members of either team. The Kipke brothers, Harry of Michigan and Ray of M. A. C., will draw heavily from the capital city. Johns of Michigan is another Lansing man and Neller and Richards of the Aggie squad are some of the most important representatives of Lansing high school on the gridiron.

A special train which will leave the college switch at 7:30 a.m. and a long string of electric cars will make up the main transportation for those not fortunate enough to travel with the gasoline caravan which is annually growing to greater proportions. If you want a day of quiet visit the old campus November 4.
"Close Beside The Winding Cedar"

Short course men are in evidence on the campus this week. The sixteen weeks' term began today and early registrations indicated that most of the classes would be well filled.

Funds were raised among the faculty and through a student tag day to send the band to Indiana with the team. Thursday afternoon the space in front of the gymnasium was crowded to give the football squad a worthy send-off.

"Buck" Weaver, student pastor, delivered a stirring address to the football squad at the People's church Sunday, October 22. His theme was the psychology of victory and he stressed the importance of the men thinking in terms of winning. He gave them examples from history to prove his point.

George J. and Bertha Lankton Henshaw, '17, with their two children, visited the campus early in the school year. Henshaw is superintendent of the block and tile department of the U. S. Gypsum company at Oakfield, N. Y., and secretary-treasurer of the cooperative store maintained by the employees of the concern. He is working on a thesis for a C. E. degree which he hopes to obtain from the college.

The South Dakota game brought one of the largest crowds of the season to College Field and among those who witnessed the defeat of the Coyotes were many alumni from nearby towns. Four found time to register at the alumni office. They were, Helen Ashley Hill, '07; Charles R. Haigh, '94; Leon F. Smith, '17, and Glenn I. Voorheis, '22. These names are representative of a wide range of classes and indicate the extent to which graduates are returning to see the team in action this fall.

R. K. Rosa, editor of the 1923 Wolverine, has chosen the following as his assistants in the job of getting out the big year book:
- **Editorial**: A. C. McIntyre, assistant editor; P. J. Hartsuch, publicity; E. M. Chapman and B. R. Doelle, Sophomore assistants.
- **Class**: M. F. Cheney, Ruth VanWinkle, H. G. Morton.
- **Art**: F. T. Burris, Celia K. Yeatter, J. R. DeFrance.
- **Feature**: Gladys Hoff, George Dobbin.
- **Administration**: J. A. Eckel.
- **Snapshot**: R. F. Loomis, Dorothy Hubbard, Don Yakeley.
- **Humor**: Sam Sullivan, Iner Severance.
- **Military**: E. E. Emshwiller, O. C. Meyer.
- **Business**: A. E. Howell, business manager; H. E. Prescott, advertising manager; Nicholas Kik, assistant advertising manager; G. N. Swanson and Leighman Crosby, Sophomore assistants.
CHEMISTRY DEPT. TRAINS WORKERS

Perfecting Teaching Staff; Some Research Work

A marked transition has taken place in the aims and objects of the department of chemistry during the last few years. Up to the early part of the last decade it had served as the "handmaiden of the other departments," according to Professor Clark, and had had little chance to work out its own destiny. For the past five years it has found its opportunity and is developing along lines in which it is certain to give its share as an entity toward the welfare of the state and is taking as its main purpose the training of technical men and the teaching of the fundamentals of this important science in a thorough way to those who come within its influence.

Professor Clark believes his staff the best he can find for the purpose of instruction in the different divisions of his subject and insists that trained teachers be used with all classes instead of research men. His viewpoint, and he is particularly enthusiastic in regard to this phase of his work, is that research men should do research work instead of trying to act as instructors. He believes that it is first necessary to carefully prepare the student in his courses and as the openings occur to take up such study of problems as seem most important through men who devote all their time to the effort.

The inauguration of the course in engineering chemistry he designates as the first step which took his department from its old field of merely serving a purpose as a course in the curriculum to the wide vistas of endeavor to aid industry. "With the institution of this course," said Professor Clark, "we were given a different status as a department and since then we have been provided with several chances to expand. The applied science course has opened an opportunity for majoring in chemistry; the agricultural and home economics courses have been broadened so they involve much more work here than they formerly did and each year enlarges the scope of our instruction.

"We have developed to the point where we can train chemists in specialized lines and we are going ahead slowly and carefully to provide facilities for the most necessary branches of the work. We do not plan to enlarge the department until it has the varied elements of a university course; our whole desire is to direct our activities along such paths as seem most desirable and fruitful and which fit in with the general policies of the college.

"As our organization stands our staff is engaged in handling general chemistry and the following specialized courses: chemistry engineering, of which H. S. Reed is in charge; biological with R. C. Huston directing the work; electro and analytical, D. T. Ewing; agricultural, C. D. Ball; textiles, B. F. Hart; such. In chemistry engineering of course there is an immense untouched field which needs many research men. In biological there is room for workers without number. In electro work we are touching upon the borders of a vital matter in Michigan industry. Water power is cheap in this state and as its development progresses this section must increase to meet the demand for trained men. Agricultural is a necessity in connection with the courses here and we are reaching out into this work in a manner which is amazing to the person who does not know the ramifications of chemistry into the realms of food production. In textiles we are entering upon a long neglected phase. Any amount of work can be done to aid manufacturers and handlers of cloth but we cannot attempt to cover the field very broadly while our activities are restricted as to the number of workers and instructors.

"As our department grows we must train men in research work. We now have two part time graduate assistants, one in biological and one in electro chemistry and this is a step in the right direction but to provide the best

(Continued on page 12)
ARBORETUM IS MARVEL OF BELGIUM

Garfield Finds Lesson for America in Brussels Plantation

Continuing his trip through Belgium, C. W. Garfield, '70, visited the famous arboretum at Brussels and recorded his observations in a letter from London. Party of the letter follows:

"We went to Brussels the special objective being a study of the National Arboretum. Our hotel at Brussels faced the Botanical Garden and we made quite a study of this decidedly interesting feature of the city. It occupies an equivalent of four city blocks and has connected with it conservatories and a fine museum of the products of the world's forests. We noted with satisfaction a section of one of our California sequoias, 1700 years old. Most of our American trees are represented and in the museum and garden we appreciated the importance of a nomenclature in Latin employed in all the collections of the world. In the Botanical Garden are fine specimens of great trees and many unusual ones. The lindens and sycamores are represented by magnificent trees. We were especially delighted with the wall display of vines from all parts of the world. The gardens displayed a wide range of herbaceous perennials and the flowers in many of the sections are gorgeous. Prof. Charles Bommer, conservator of the gardens and the arboretum, Forest Counsellor to the Government, cancelled a lecture engagement at the university and devoted himself to us for half a day. He has a charming personality, understands English perfectly and speaks it very well.

"We engaged a taxi, the driver having been chauffeur for an American family some years. He proved to be a useful companion on this drive. The Arboretum is about eight miles distant from the city and covers about 100 acres. About four miles out we entered the finest beech forest in the world, and constantly expressed our delight while riding through it over the succession of great trees, two to four feet in diameter and holding their size for 100 feet or more of hole. I have seen similar trees in northern Michigan and when I saw the great care and thought put into the preservation of this forest and its great usefulness to the public I groaned over our own profligacy in forest destruction. Oh, why will not our government stay the axe and save something of this magnificent heritage for generations to come!"

"We saw what we could from the automobile. The rolling land is admirably adapted to the purpose of showing trees of the world. The arrangement and grouping of the trees of different latitudes, from Alaska to the equator, and also the species from the Southern hemisphere, were deftly done, having in mind not only the colonizing of species but their artistic setting. The Professor exhibited to us very perfect maps and his system of gathering from year to year statistical information concerning the growth and habits of trees and making graphic in charts all this valuable information. He said the government put great emphasis upon facts concerning the usefulness of species for forest purposes.

"We noted with surprise the wonderful growth of the twenty year plantations of American trees. The professor piloted us through an extensive forest owned before the war by a German ducal family, but which the Belgian government took over as a small item of requirement for the destruction wrought by the ravaging hordes of Germany.

"In many ways this half day in the Belgian arboretum was the most eventful experience of our continental trip. I learned more things that I can put to some practical use in my home connections than I have gathered elsewhere.

"The income from these Belgian forests is a large item and is an urgent argument from the commercial standpoint in favor of the careful, methodical and painstaking study of forest trees.

"I am satisfied that the study of trees as illustrated in this arboretum will be of inestimable value to the world and this experience proves to me the wisdom of Mr. Jay Morton in establishing an arboretum near Chicago as a means of education for our Middle West with regard to tree values.

"The next morning we took a ride around Brussels. A boulevard, well planted, extends around the city. We spent some time around the Palace of Justice which is talked about as one of the world's great structures. I confess to a feeling of keen disappointment in the building. It looks as if it were in a slow process of disintegration and there are indications of defects in architecture.

"We enjoyed the ride to Ostend and had a most attractive traveling companion in a member of an architectural firm which designs many of the Cunarders. Our stay at Ostend was brief and our journey across the Channel uneventful.

"We landed at Dover at 7 p. m. and traveled in a luxurious train to London. It seemed good to again be able to converse with any chance companion in our own language and the beauty of rural England once more made a deep impression upon us. For an hour after leaving Dover we seemed to be traversing orchards of all sizes and ages and apparently in good health and under good care although not under clean cultivation like our orchards. The land is not so intensively cropped as in France but the trees and small (Continued on page 12)
INDIANA OUTSCORES AGGIE TEAM

Hoosiers Win Hollow Victory; Acclaim Band and Rooters

"Glorious defeats" are salt in the wounds of a winning spirit but if there be any justification in the term then it can rightfully be applied to the 14 to 6 victory which Indiana officially registered against the Aggies at Bloomington last Saturday. The first tally of the day was the result of football luck. Brady attempted to catch the first kick-off, fumbled and the enemy had the ball on our 12-yard line. It took several plays to put it over but that incident was responsible for the outcome. On several occasions the Green and White carried the ball to within striking distance of the goal but failed to force it across by a narrow margin; sometimes through penalties, seldom through lack of power.

The Hoosiers tallied their second touchdown of the game in the third quarter through the medium of forward passes and a few line bucks after intercepting one of Crane's heaves near the center of the field. In the final period the Aggies put up a strong exhibition of offensive football. Determined to wipe out the difference in scores the Green and White tackled with a vengeance which threatened to take the Indiana team off its feet. Starting the quarter they had the ball on the Hoosier 30-yard line and gained 15 yards through a penalty. A pass was intercepted and Indiana punted to the center of the field, then a smashing attack carried the ball close enough to the goal for Crane to throw a pass to Huffman, who scrambled across the goal line. The latter tried for the extra point but failed.

As a tribute to the fighting Aggies and their wonderful band the crowd of 8,000,000 people stood in the stands while the men left the field and bared heads were the rule as "Alma Mater" was played. The loyal band of rooters which accompanied the team by devious routes found a warm welcome at the hands of the Indiana student body and kept the Aggie spirit in evidence on the field in spite of a deficiency in numbers. After Captain Clark had exhibited the polished manner in which his organization executed complicated maneuvers the home band, nearly double the Aggie contingent, refused to parade in spite of repeated calls from the stands.

A fair sized crowd followed the fortunes of the M. A. C. team at the armory where a play by play story was read. When the news of a touchdown in the fourth quarter was ticked off the operator deserted his post to shout his message to the waiting students. The details they heard, in part:

Hannah kicked off and Brady fumbled Raymond, recovering for Indiana on the Aggie 12-yard line. Thomas made two around right end, Hannah five through center, Raymond was stopped at the line and Hannah carried the leather across son a line buck. Thomas kicked goal. Score: Indiana 7, M. A. C. O.

Richards returned the kick to his own 22-yard line, M. A. C. lost 15 yards for holding, Brady failed but Johnson made 15 yards on punt formation. Brady was thrown for a loss and Johnson made first down. Johnson punted to the Indiana 40-yard line. Hannah was soon forced to kick and Brady returned the ball 10 yards. Johnson and Liotet made first down. The ball reached the center of the field and Johnson again punted, this time the runner was downed on his 20-yard line. The Indiana backs were powerless against the Aggie defense and Hannah kicked to Richards on his 20-yard line. Johnson fell attempting a play from punt formation and punted to the Indiana 45-yard line. Indiana was set back five yards for offside, Beckley replaced Brady. Indiana again failed to penetrate the Aggie wall. Hanna kicked to the Aggie ten-yard line. Johnson punted out from behind the goal posts to his own 35-yard line where the ball went out of bounds. Then the quarter ended.

Three plays and Hannah punted to Richards on his 18-yard line. Aggie backs were stopped at the line and Johnson kicked to the Indiana 40-yard line. Hannah again was called upon to punt. Richards received the kick and was downed on his 18-yard mark. Johnson and Liotet made first down. Burris relieved Johnson. Hultzman punted 45 yards to the Indiana 25-yard line. The Hoosiers made one first down. Indiana was penalized 15 yards for hurling and punished over the side lines at the 45-yard line. Passes failed and Hultzman punted to the Indiana 10-yard line. Hannah kicked to Richards who returned to the Hoosier 35-yard line. Richards to Liotet gained 15 yards, and Liotet carried the ball to the Indiana ten-yard line. The Aggies lost five yards for offside and the ball went over Moonmaw made first down around right end but the rest of its tries were ineffective and Richards had the ball on his own 20-yard line when the half ended.

Crane went in for Richards and returned the ball 18 yards to his own 28-yard line. After two plays were broken up Hultzman punted to the Indiana 45-yard line. The Hoosiers chalked up a first down on a line play and a trip around end and then Hannah kicked to the Aggie 20-yard line. On the next punt Indiana had the ball on the M. A. C. 45-yard line. Liotet trapped a pass from Thomas. Crane to Beckley made six yards, then Beckley fumbled, with an Indiana back recovering the ball. Passes and a few short line gains ended in Moonmaw tossing one to Thomas for the touchdown. Thomas booted
it over the bar. Score: Indiana 14, M. A. C. 0.

A few plays followed the kick-off and the Aggies had the ball near the middle of the field when the whistle blew, ending the period.

Thorpe went in for Taylor and Neller for Beckley. A penalty put the Aggies in a position to score with the ball only 15 yards from the goal. Moomaw intercepted Crane's pass. Johnson went back into the game, replacing Lioret. Crane received Hannah's punt on the Indiana 45-yard line. Then the Aggies marched on the goal. Johnson, Neller and Burris advanced behind excellent interference and Crane passed to Hultman over the goal line. Hultman failed to kick the goal. Score: Indiana 14, M. A. C. 6.

Hughes returned the kick-off to his 45-yard line after taking Morrison's position at guard. Punts were exchanged and Indiana had the ball in the center of the field when the final whistle stopped play.

The summary:

Indiana .......... 7 0 7 0—14
Michigan Aggie.. 0 0 0 6—6

Touchdowns—Hannah, Hultman, Thomas. Goals from touchdown—Thomas 2. Referee—Gardner (Yale). Umpire—Huegel (Marquette). Head linesman—Pratt (Michigan). Substitutions—Moomaw for Howard; Niness for E. Smith; Woodward for Wilkens; Beckley for Brady; Burris for Johnson; Crane for Richards; Thorpe for Taylor; Miller for Beckley; Hughes for Morrison; McMillan for Richards.

When the band and team returned from Bloomington more than 500 students were on hand at the Grand Trunk station to welcome them. There was cheering and music enough for the most enthusiastic. It was a fit reception for a battling team.

Its demonstration of offensive power in the last period gave the Aggies renewed confidence that their team would be a force to reckon with when it meets the Maize and Blue at Ann Arbor next Saturday. In general the Green and White players outgamed their opponents but, to use an old and much abused alibi, the breaks of the game were entirely favorable to the Indiana eleven.

Baguley, the Aggies' noted distance star, led the field home in the Notre Dame meet at East Lansing last Saturday, finishing the five-mile course in 25:59. The M. A. C. entrants took five of the first seven places, Notre Dame scoring third and fourth.
Arboretum is Marvel of Belgium

(Continued from page 9)

areas of woodland scattered over the countryside gave a finish to the landscape which captured us.

"After having enjoyed the rugged scenery of the Alps and the seductive play of sunlight upon the snow and ice of the mountain tops it was a surprise to be greeted in Merrie England by the most gorgeous sunset any of our party had ever witnessed. As our tram was speeding along we were for a few moments enveloped in a shower and then there burst upon us a lake in the sky. Then we looked behind us and beheld a marvel of a double rainbow, completely hiding the dark background of the eastern heavens. The delight was prolonged by an afterglow of effulgence that was rapturous in its tinting and touching. We felt we had been greatly honored by this gorgeous exhibit as we entered a domain replete with historic interest and with whose inhabitants we felt a kinship that warmed the cockles of our hearts."

Chemistry Department Trains Workers

(Continued from page 8)

instruction and to train men as chemists the number of graduate workers must be greatly increased. We have determined the lines along which this work must go as I have outlined them above and are getting ready to fill our place in a greater M. A. C. when we are given the new building which is proposed for this department.

"Now we are bending the major part of our efforts toward proper instruction. There are no student assistants in our laboratories. In addition to this those men on our staff who are specializing on different subjects are carrying out interesting research to aid industry and better prepare them for teaching. Huston is experimenting with white rats to obtain data on calcium retention in animals. This has an important bearing upon rations, the effect of salt upon the various vitamins, and other phases of the question. Ball is continuing work upon the effects produced by keeping fruit in an atmosphere composed of various gases. This should aid the horticultural industry in its preserving problems. Hartsuch is working out a scientific basis for the laundering of fabric and analytical methods of detecting the ingredients of the various grades of cloth. Both of these questions intimately affect every individual. In electrochemistry Ewing is developing methods of producing dye bases and other organic compounds which are of such great necessity to new industries which gained headway during the war. In industrial or engineering chemistry Reed and Publow are endeavoring to perfect apparatus for the carrying out of chemical reactions necessary to produce the new light metals which are coming into wide usage in the motor car industry. "I feel we are advancing toward our goal of better preparation for students of chemistry. We are building up a carefully selected staff of men who enjoy their work and are giving the best they have to the college. We have passed the point where we are considered merely as a part of the college to contribute a necessary course to the work of the different divisions and are ready to step out into a field of more general usefulness."

A. L. Bibbins, '15, was a visitor to the campus early this month and L. C. Exelby, famous as the fullback on Aggie teams from '08 to '11 also dropped in to look over the squad.

Douglas Malloch, of Chicago, 'poet of the woods," delivered his lecture on "Some Sinners I Have Met" as the first number on the Liberal Arts course at the Gymnasium last Tuesday night.

CLASS NOTES

Good snapshots of yourself at work, at play, or with your family will be used in the Record if they are suitable for making cuts. Let your friends see you as you are. In sending pictures be sure they are fully identified as to names and places and are as clear as possible.

"79
A. H. Phinney is enjoying the sunshine and beneficial temperature of Florida during the winter. He is at St. Petersburg.

79
Clifton B. Charles is on the job at Bangor, Michigan, caring for his affairs as a retired farmer. He notes that fishing is his main recreation.

83
J. H. Smith, formerly lived in Chicago. His mail was forwarded from there to Geneva, Switzerland, and was returned as unclaimed.

85
J. A. Dart lives at Lincoln Hotel, Indianapolis, Indiana.

86
G. W. Park is a seedsmen, florist and publisher at Dunedin, Florida.

88
N. S. and Mary Carpenter Mayo receive their mail at 4650 Maiden street, Chicago. Mayo is manager of the veterinary and export departments of the Abbott Laboratories, manufacturers of pharmaceutical and fine chemicals. He says: "Business is growing, we have just purchased the Dermatological Research Institute of Philadelphia. Our son, Robert is a senior in civil engineering at Armour Institute, daughter, Dorothy, teaches Spanish in Harrison Technical High School, Chicago.

89
Gager C. Davis wants The Record sent to him at
W. W. Parker is neither in Olga nor Tacoma, Washington. His new address has not reached the office.

A. T. Stevens writes from the Connecticut Agricultural College: "At the same old place as I have been for the last 15 years. Am now professor of vegetable gardening. I have in charge all vegetable work both in field and under glass together with all the small fruits. Am making a plantation of highly bred blueberries next spring. Just as old M. A. C. should do."

A. C. Burnham tells of a recent trip to Honolulu as a member of the committee on harbor improvements of Los Angeles. On his blue slip he informs us: "Just returned from Honolulu (wife and I) with the Chamber of Commerce excursion of Los Angeles. Am member of committee of one hundred of the chamber on harbor improvement of Los Angeles. The object of the trip was to promote commercial and industrial relations between Los Angeles harbor and the Hawaiian Islands. We had a great time in the land of sugar, pineapples and flowers. Business is good. We are going to have several years now of the best times we have ever had. I am author of a book entitled "Building Business from Small Beginnings", to be published in March by the Ronald Press Company of New York which all M. A. C. students should read as it takes up a new angle of life planning and emphasizes the fact that the great opportunities for young men lie in starting small businesses and growing big with the business rather than going to work for a big corporation and becoming a mere cog in a machine."

W. M. Brown says he is still doing business as Brown Hutchinson Iron Works in general structural and miscellaneous iron. He reports everything going fine. His address is Clay street and Grand Trunk Railroad, Detroit.

Wilfred Strong has moved from 414 Pearl street to 720 Eleanor street in Kalamazoo.

Robert F. Bell has moved his office from 25 Blynn Building, Cincinnati, Ohio, and has not given us his new address.

G. P. Boomsliter advised us to address his Record to 48 Willey Driveway, Morgantown, West Virginia.

Clara Morley lives at 1722D North Wilcox avenue, Los Angeles.

W. W. Gasser has moved from Gladstone to Marquette, Michigan, according to the postal authorities.

Ralph Carr has changed his address from Adrian to Dearborn, Michigan, where he may be addressed in care of the Wayne County Agricultural Bureau.

F. F. Burroughs now lives at 3039 Flora street, Kansas City, Missouri.

Barbara Van Heulen is doing club work with the extension division at the college.

R. Z. Hopkins is plant superintendent for the Hudson Motor Car Company with offices at 2024 East Grand Boulevard, Detroit. He says he has been in Detroit 27 years. Mrs. Hopkins has been in Detroit 17 years. Mrs. Hopkins (Bertha Norton, '10) is doing graduate work at University of Michigan.

Guerdon L. Dimmick, Jr., is general manager for the Highway Motor Bus Company with offices at 231 Bagley avenue, Detroit.

Ralph M. Powell writes from 244 Edgewood avenue, New Haven, Connecticut: "At present I am working in the office of the city engineer of New Haven, and Mrs. Powell (Maudie Mason, '13) is doing graduate work at Yale in physiological chemistry. I hope to get back to college about Christmas time and again for Commencement as it will be my only chance for another seven years."
Don Francisco, '14, Mrs. Don Francisco and Donald, 6, at Carmel-by-the-Sea, Calif., September 1922.

Allen R. Nixon was formerly addressed at 9595 Prairie avenue, Detroit, but that address no longer reaches him. He has neglected to send in a better one.

A. L. Birdsell has moved in Grand Rapids to 645 Evans street S. E.

Margaret Pratt Clafin sends her blue slip in from 112 Dudley avenue, Norbertha, Pennsylvania. This comes from James H. Foote, 1214 W. Washington avenue, Jackson, "Same job as electrical engineer of the Consumers Power Company with headquarters at White Cloud. He reports having seen Nels Hansen and M. M. Buck at an A. E. meeting in Muskegon recently. C. V. and Marjorie George, '12, (Ballard) are living in Lansing at 1528 Nine street. Ballard is assistant county engineer for Newaygo county with headquarters at White Cloud. He reports having seen Nels Hansen and M. M. Buck at an A. E. meeting in Muskegon recently.

H. C. "Runt" Hall requests a change of address to Pysht, Washington. "Runt" is again in the employ of the Merrell-Ring Co., but will return to his ranch along the Straits in the spring.

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The Osgoods, Glenn, Fay Stitt, '20, and Dorothy Jean, are living at St. Johns, where they report no important changes.

Daniel Mead is construction engineer with the Owen Ames and Kimball Company of Grand Rapids, and is now working on the new Hotel. Mead lives at 603 Paris avenue.

Galen M. Glidden, according to postal information, moved to Wellington, Ohio.

T. C. and Marjorie Cook, '19, (Dee), report: "Our present address is 710 Second street. We moved very fast one night from our former home, as the house warming by fire was a little too uncomfortable for peace of mind or body. We lost the greater share of our belongings but are now fairly comfortable again." They are living in Jackson, Michigan.

Richard and Dorothy Curtiss, '21, (Doyle), have moved to Carlton, Mich.

J. E. Turner asks us to change his mailing address to 715 South Eighth street, Escanaba, with general offices at 50 Triangle building, Rockford, Illinois.

Postal information has been received to the effect that R. J. and Beatrice Stewart, '20, (DeMond), have moved to Virginia, Illinois.

J. H. Harmon may be addressed in care of the Entomology department, East Lansing.
W. L. Mallmann is assistant professor of Bacteriology at the college and lives neighbor to C. W. McKibbin, '11, at 316 Marshall street, East Lansing.

Edgar Osborne sends in a recent change of address to 822 West Anne street, Flint.

Frederick A. Clinton may be found at 53 Oakwood avenue, West Hartford, Connecticut.

Ordelia Southard is teaching home economics at the Houghton school in Detroit and lives at 652 Temple avenue.

Robert B. Huxtable has returned to Lansing and in the employ of the Reo Motor Car Company. He gives the following explanation: "Kindly change my address to 207 W. Franklin avenue, Lansing, as I am no longer with the Fruit Dispatch Company, New York City. Instead of banana transportation work, I try to help make good Reo automobiles."

Jane McNinch is starting her fourth year in Port Huron as supervisor of household arts. She lives at 909 Court street.

Bernice Campbell is teaching in Port Angeles, Washington, again this year and gets her mail from Box 668.

Some time ago we had mail returned addressed to Lawrence J. Bottimer from Houston, Texas. Who other day we received a check drawn on a Shreveport, Louisiana, bank, enclosed in an envelope with a Liberty, Texas, return on it, along with a statement indicating that Bottimer was again in Houston, Texas.

Helen Billiard is again teaching in Muskegon, and lives at 209 Peck street.

A. W. Winston, formerly at Midland, has moved to 701 S. Michigan, 399 West Morrell street.

Ovid Alderman has moved in New Haven, Conn., to 17 Compton street.

E. A. Winston, who received his masters' degree at Cornell University last June is now working with A. L. Bibbins, '15. His address is G. L. F. Exchange, 300 W. Genesee street, Syracuse, New York.

Clarence Ramsey is assistant to the superintendent of the Industrial School for Boys at Lansing.

Carl L. Warren writes from Moreton Farm, Coldwater, New York: "Still with Joseph Harris Company, seedman. Have been doing trial ground work this summer."

J. W. Wagner is Wayne county club agent and is a neighbor of Henry Ford's at Dearborn.

H. V. Hoffman has changed his abode to 371 27th street, Milwaukee, Wisconsin.

Charles N. Silcox, who received his masters' degree at Cornell University last June is now teaching in the industrial school at Lansing.

Asa Winter has left Addison, Michigan, without notifying us of his change of address.

Ernest D. Memke is now an instructor in engineering at Gettysburg College.

He describes his new location as follows: "This is a school of about 500 students, mostly men. The engineering department is one of the smallest here. There are many things of interest to be seen here especially the old battle field with its monuments."

Herbert Hartwig is teaching farm crops in the agricultural college at Syracuse University. He received his M. S. degree at Iowa State last June.

Daniel Henry, of the Henry Electric Company, reports: "This is a school of about 600 students, mostly men. The engineering department is one of the smallest here. There are many things of interest to be seen here especially the old battle field with its monuments."

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